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CONFIRMATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE CHAES20.1C1CP1 3813 07/11/2003 Won-Mok Lee 10/618,108 EXAMINER 20995 7590 ACQUAH, SAMUEL A KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET ART UNIT PAPER NUMBER FOURTEENTH FLOOR 1711 IRVINE, CA 92614 DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	K
Office Action Summary	10/618,108	LEE, WON-MOK	·
	Examiner	Art Unit	
	SAMUEL A. ACQUAH	1711	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication D (35 U.S.C. § 133).	ı.
Status			
1) Responsive to communication(s) filed on			
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.		
3) Since this application is in condition for allowar			;
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1-65 is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-65</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) acce	epted or b) $\square$ objected to by the ${ t E}$	Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex			l).
Priority under 35 U.S.C. § 119			
12) △ Acknowledgment is made of a claim for foreign  a) △ All b) ☐ Some * c) ☐ None of:  1. △ Certified copies of the priority documents  2. ☐ Certified copies of the priority documents  3. ☐ Copies of the certified copies of the priori	s have been received. s have been received in Applicati	on No	
application from the International Bureau			
* See the attached detailed Office action for a list		d.	
Attachment(s)	A) T Interview Cummen	(PTO-413)	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date</li> </ol>	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		

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## **DETAILED ACTION**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-65 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 10/611,417. Although the conflicting claims are not identical, they are not patentably distinct from each other because the microcapsule comprising a shell and core comprising a phase-change material and a nucleating agent of this application is obviously the same as the microcapsule of the co-pending application, together with the claimed uses.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant et al 5,366,801 in view of JP 9031451.

The primary reference discloses a fabric with reversible enhanced thermal properties. The fabric comprises a coating comprising microcapsules with phase-change material as claimed. The prior art does not disclose the use of a nucleating agent in addition to the phase-change agent as claimed.

The abstract of the secondary reference discloses thermal storage medium containing an organic compound causing a phase change and a specific nucleating agent. Patentees teach that the phase change agent is a straight-chain aliphatic HC having >= 10C, together with a nucleating agent which is an amine derivative, an alcohol derivative or a carboxylic acid derivative of the phase change agent. Patentees further teach that the two components may be enclosed in a microcapsule. It is the Examiner's position that microcapsules and uses as claimed would have been obvious based on the disclosures of the cited prior arts as discussed above.

- 4. Other references listed on PTO-1449 have been made part of the record.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL A. ACQUAH whose telephone number is 571-272-1065. The examiner can normally be reached on M-TH, FRIDAYS OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAMES SEIDLECK can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.A.A. 05/02/04

SAMUEL A. ACQUAH PRIMARY EXAMINER GROUP-4590 /750